[000211] ABSTRACT OF THE DISCLOSURE

[000212] A wireless communication receiver (20) comprises an antenna array (22) and a joint searcher and channel estimator (24). Plural antenna elements of the array provide respective plural signals (indicative of one or more arriving wavefronts) to the joint searcher and channel estimator. The joint searcher and channel estimator essentially concurrently considers the plural signals provided by the plural antennas for determining both a time of arrival and composite channel coefficient for each wavefront. The joint searcher and channel estimator applies the channel coefficient and the time of arrival to a detector which provides, e.g., a symbol estimate. Since it contemporaneously processes the signals from plural antennas over a sampling window in order to determine both time of arrival and the channel coefficient, the joint searcher and channel estimator (24) is considered a two dimensional unit. A first dimension is with reference to a time index of the sampling window, i.e., a sampling window time index. A second dimension is a spatial dimension imparted by the spacing of the plural antennas of the array. The spatial joint searcher and channel estimator may take differing embodiments and have differing implementations. In one example, illustrative embodiment the joint searcher and channel estimator includes a non-parametric type correlator (e.g., a correlator which performs a Fast Fourier Transform (FFT) calculation). In another example, illustrative embodiment the joint searcher and channel estimator utilizes a parametric approach.